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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,202	11/13/2001	Bruno Scheumacher	P 284108 RP-00296-US2	6169

909 7590 11/08/2002

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EXAMINER

LUBY, MATTHEW D

ART UNIT

PAPER NUMBER

3611

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,202

Applicant(s)

SCHEUMACHER ET AL.

Examiner

Matt Luby

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/13/01
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "214" has been used to designate both a seal (page 8) and circular clamps (page 9). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "216" has been used to designate both a flexible member and a fastening member (page 9). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 4-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following limitations lack proper antecedent basis:

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"said heat exchanger" (claim 4, line 2), "said air inlet" (claim 4, line 3; claim 13, line 2),
"said air passage (claims 5 and 6, line 1) and "said heat exchanger" (claim 7, line 1;
claim 11, line 3).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 5, 6, 15-17, 19-21 and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lakosky (5,598,065) in view of Applicant's Admitted Prior Art (AAPA).

Lakosky discloses all of Applicants' claimed invention (figure 1; col. 4, lines 21-23) but does not specifically disclose that a turbocharger or a CVT (continuously variable transmission) is used. AAPA discloses that it is well known to use a turbocharger in conjunction with a four-stroke engine and a CVT in order to increase power output and fuel efficiency of the engine and to reduce or prevent turbo lag (page 2, lines 5-7 and page 21, lines 16-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a turbocharger on the four-stroke engine of Lakosky as taught by AAPA in order to increase power output and fuel efficiency of the engine.

Regarding claims 2 and 15-17, all of the limitations recited are inherent properties of an engine and a turbocharger, e.g., that an engine has cylinders housed in combustion chambers which receive air through an inlet/throttle body and expel unused air/fuel mixture through an outlet and that turbochargers have an inlet inputting air from the atmosphere through a duct and an inlet inputting exhaust gas from the engine to pressurize/compress the total volume of air therein, thereby turbocharging the air that is to be eventually input into the engine, and expelling non-used air through an exhaust system to a muffler.

Regarding claims 5, 6, 20, 21 and 26-30 as best understood, the modified Lakosky snowmobile does not specifically disclose whether the air passage is positioned fore or aft of the engine, where the CVT is positioned relative to the turbocharger and what side of the engine the turbocharger, plenum and CVT are disposed on. It would have been obvious to one having ordinary skill in the art at the time the invention was made to put the air passage either fore or aft of the engine, to put the CVT on an opposite or adjacent side to the turbocharger or plenum, to put the turbocharger on a starboard or port side of the engine and to put the plenum and turbocharger on opposite sides of the engine, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

7. Claims 3, 4, 7-14, 18 and 2, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lakosky in view of AAPA as applied to claim 1 above, and further in view of Cooper et al. (4,698,761).

The modified Lakosky device discloses all of Applicant's claimed invention except for a heat exchanger/intercooler connected to the turbocharger (by a duct) and a plenum connected to the heat exchanger/intercooler (by a duct), wherein the intercooler has an intake portion and an outlet portion connected by conduits. Cooper et al. disclose that a heat exchanger/intercooler connected to a turbocharger (by a duct - this is inherent) and a plenum connected to the heat exchanger/intercooler (by a duct - this is inherent) is well known for use with an engine to supply clean, compressed air to the cylinders of the engine (col. 7, line 53 to col. 8, line 11). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a heat exchanger/intercooler connected to the turbocharger and a plenum connected to the heat exchanger/intercooler on the modified Lakosky snowmobile as taught by Cooper et al. in order to supply clean, compressed air to the cylinders of the engine.

Regarding claim 7, it is noted that it is inherent that intercooler have an inlet and outlet connected by conduits.

Regarding claims 8-10, Cooper et al. does not specifically disclose the positional arrangement of the intercooler. It would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the intercooler normally, parallel or at an angle to the oncoming air flow, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 14, the modified Lakosky snowmobile does not specifically disclose the internal volume of the plenum. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the internal volume

of the plenum between 3 and 5 liters, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claims 18 and 22, the modified Lakosky snowmobile does not specifically disclose the speed range for which the turbocharger pressurizes the air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the speed range below 3000 rpm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Luby whose telephone number is (703) 305-0441. The examiner can normally be reached on Monday-Friday, 9:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (703) 308-0629. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Matt Luby
Examiner
Art Unit 3611



M.L.
November 1, 2002



Lesley D. Morris
~~Primary Examiner~~
SPE AU3611